

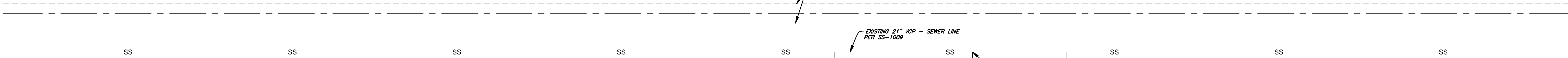
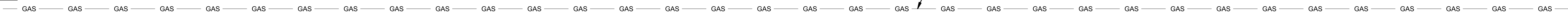
- Grading operations shall be conducted in accordance with the code of the City of Torrance and all revisions thereto.
- A Pre-Job meeting with the Grading Inspector, (310) 618-5915, is required prior to the start of grading operations. Subsequent inspections shall be required in accordance with the Inspector's instructions of the first inspection.
- Estimated earthwork yardage including recompaction of dumps or existing loose fill:

In Lots:	_____	Cubic Yards
Maximum Depth of Fill	<u>3.0</u>	Feet
Cut In Lots:	<u>3.0</u>	Cubic Yards
Maximum Depth of Cut:	<u>3.0</u>	Feet
- Excavation & Recomposition:

In Lots:	_____	Cubic Yards
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- Existing ground upon which fill or base is to be placed shall be cleared of weeds, debris, topsoil, and all other deleterious material; no fill shall be placed until preparation of the existing ground has been approved by the Department of Public Works.
- Protective measures shall be taken by the contractor and the owner to protect adjacent property, public and utilities during grading operations. The contractor assumes all liability for the underground utility pipes, conduits, or structures, whether shown or not on the plan.
- Water runoff shall be controlled as determined by the Soils Engineer and the Inspector.
- Permission shall be secured from the Engineering Department if the trucks are loaded in the street.
- Unsuitable material shall be disposed of off-site. The location of dumping excess soil shall be approved by the Grading Inspector prior to starting excavation.
- If a grading job extends beyond a time of time exceeding six months, the Department may require planning of those portions of the job where all other grading requirements have been met in order to prevent dust and erosion.
- Loose material shall not exceed 3" depth on a filled slope.
- All slopes so designated shall be planted with an approved perennial for erosion control. Planting shall be sprinklered and maintained until planting has reached mature growth.
- All loose on site fill shall be removed and compacted.
- All earth shall be accomplished in accordance with recommendations set forth in the soils report by dated _____ and the Geological Report by _____.
- All man-made fill shall be compacted to a minimum 90 percent of the maximum dry density of the fill material per the current version of ASTM D1557.
- Sufficient tests of the fill soils shall be made to determine the relative compactness of the fill in accordance with the following minimum guidelines:
 - A. One test for each two foot vertical lift.
 - B. One test for each 500 cubic yards of material placed.
 - C. One test at the location of the final fill slope for each building site (Lot) in each four foot vertical lift of portion thereof.
- D. One test in the vicinity of each building pad for each four foot vertical lift or portion thereof.
- Import Soils should consist of clean, compactable materials possessing expansion characteristics similar to or better than the upper on-site Soils. Import soils shall be free of trash, debris or other objectionable materials. Contractor shall notify the Project Geotechnical Engineer not less than 72 hours in advance of the arrival of any soils to be imported. Each imported Import source shall be sampled, tested, and approved prior to delivery of soils for use on the site.
- All fill under the building foundation must be certified by the Soils Engineer as to proper bearing value design and its compliance with the preliminary soils report on note 13.
- All subgrade under areas to be paved shall be certified by the Soils Engineer in compliance with Section 81.2.34g) of the Torrance Municipal Code.
- The engineering Geologist, Soils Engineer and Civil Engineer, in compliance with Section 81.2.37g) of the Torrance Municipal Code shall be required to submit the Department with a grading certification upon completion of the job.
- An as-graded plan prepared by the Civil Engineer of record shall be submitted with the required grading certifications to the Department upon job completion.
- Approval of this plan is for grading and paving on site only and does not constitute approval of any building, wall, or other structure shown on site nor any other improvements shown.
- No fill shall be placed during unfavorable weather conditions. The Soils Engineer and Grading Inspector shall verify moisture content and density prior to placement of additional fill after heavy rains.
- All construction in public right of way shall be under separate permit and approved by the Engineering Department.

1. Owner shall keep the construction area sufficiently dampened to control dust caused by grading and construction. Owner shall, at all times, provide reasonable control of dust caused by wind.
2. The export or import material in each truckload shall be kept low enough to prevent spillage and shall be sufficiently wet down to prevent dust.
3. A staging area shall be designated where each truck is prepared for road travel and all loose material removed. Any substance to drop from the body, tires, or wheels of any vehicle upon the public right of way shall be removed immediately and permanently.
4. Erosion control measures shall be in place from November 15 through April 15.

* SEPARATE PERMIT REQUIRED




- ① CONSTRUCT 6' WIDE WALKWAY – SEE DETAILS PER LANDSCAPE PLANS
- ② CONSTRUCT LIGHT POLE – SEE DETAILS PER LANDSCAPE PLANS *
- ③ EXISTING WALL – PROTECT IN PLACE – SEE LANDSCAPE PLANS
- ④ VEHICULAR ACCESS GATE – SEE DETAILS PER LANDSCAPE PLANS *
- ⑤ CONSTRUCT FENCE – SEE DETAILS PER LANDSCAPE PLANS
- ⑥ EXISTING WALL/FENCE – PROTECT IN PLACE – SEE LANDSCAPE PLANS
- ⑦ PREFABRICATED RESTROOM – SEE DETAILS PER LANDSCAPE PLANS *
- ⑧ ENTRY PILASTER – SEE DETAILS PER LANDSCAPE PLANS *
- ⑨ PILASTER – SEE DETAILS PER LANDSCAPE PLANS *
- ⑩ SIGNAGE WALL – SEE DETAILS PER LANDSCAPE PLANS *

- (11) RETAINING CURB AND FENCE – SEE DETAILS PER LANDSCAPE PLANS
- (12) RETAINING CURB – SEE DETAILS PER LANDSCAPE PLANS
- (13) INSTALL PVC PIPE – SDR 35, LENGTH AND SIZE AS SHOWN PER PLAN
- (14) INSTALL AREA DRAIN PER DETAIL A ON SHEET C-1
- (15) INSTALL AREA DRAIN PER DETAIL B ON SHEET C-1
- (16) INSTALL CATCH BASIN PER DETAIL C ON SHEET C-1
- (17) INSTALL 4" SEWER LATERAL PER CITY OF TORRANCE STD. PLAN T-200 SERIES *
- (18) INSTALL 1" WATER LINE PER CITY OF TORRANCE STD. PLAN T-700 SERIES *
USE 1" COPPER LINE AND AFFIX ID TAPE TO LINE.
- * (19) CONNECT 4" SEWER LATERAL TO EXISTING VCP PER CITY STD PLAN T-203 *
- (20) INSTALL BACKFLOW VALVE PER FEBCO 1"LF 825Y- LOCATION AS SHOWN BEHIND WALL.
CONNECT BACKFLOW VALVE TO EXISTING WATER PER DETAIL HEREON.

LEGEND:

_____	PROPERTY LINE	TC	TOP OF CURB
_____	DAY LIGHT LINE (GRADING LIMIT)	FL	FLOWLINE
—W—	EXISTING WATER LINE	FS	FINISH SURFACE
—W—	PROPOSED WATER LINE	FG	FINISH GRADE
—SS—	EXISTING SEWER LINE	BW	BACK OF WALK
—SS—	PROPOSED SEWER LINE	GR	EX. GROUND
—RW—	EXISTING RECLAIMED WATER LINE	R/W	RIGHT OF WAY
=====	EXISTING STORM DRAIN LINE	INV.	INVERT
_____	PROPOSED CONTOUR LINES	TC	TOP OF GRADE
— 1% —	STORMDRAIN LINE (1% MIN. GRADE)	HP	HIGH POINT
65.50 F.S.	PROPOSED GRADE ELEVATIONS	EX.	EXISTING
65.50 F.S.	EXISTING GRADE ELEVATIONS	R/W	RIGHT OF WAY
	DRAINAGE SWALE OR DIRECTION OF FLOW	R/W	RIGHT OF WAY
□ ○	STORMDRAIN / AREA DRAIN INLETS		

<p>McMASTER PARK - CITY OF TORRANCE</p> <p style="text-align: center;">GRADING & DRAINAGE PLAN</p> <p style="text-align: center;">FOR PUEBLO PARK</p> <p>2252 DEL AMO BOULEVARS, TORRANCE, CALIFORNIA</p>	<p>CIVIL ENGINEER:</p> <p>PREPARED BY OR UNDER THE DIRECTION OF:</p> <div style="border: 1px solid black; padding: 5px; text-align: center;">  </div> <p>DATE: 06/19/2014</p> <p>NAME: AHMAD ABOUALWADH</p> <p>SCALE: AS NOTED DATE: 5/06/2014</p>
<p>SHEET: C-2</p> <p>OF 4 SHEETS</p>	

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION AND SUPPLEMENTS THERETO, AS WRITTEN AND PROMULGATED BY PUBLIC WORKS DEPARTMENTS, INCLUDING BUT NOT LIMITED TO, THE STANDARD SPECIFICATIONS, THE TOLERANCE STANDARDS, AND TO THE SATISFACTION OF THE COMMUNITY DEVELOPMENT OR PUBLIC WORKS DIRECTOR.

2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE, VERIFY DEPTH AND PROTECT ALL STRUCTURES, INCLUDING SUBSTRUCTURES, SHOWN ON THE PLAN. THE CONTRACTOR SHALL BEAR THE EXTENT OF REPAIRS TO EXISTING UTILITIES AND STRUCTURES DAMAGED BY ANY MEAN DURING PROSECUTION OF THE WORK. ALL REPAIRS AND REPLACEMENTS SHALL BE DONE IN THE PRESENCE OF THE INSPECTOR. ALL LOCATIONS SHOWN ON THE PLAN FOR UTILITIES SHALL BE MARKED WITH AVALON RECORDS OR RECORDS OF THEIR COMPLETENESS AND CORRECTNESS ARE IN NO WAY GUARANTEED.

3. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) AT 1-800-227-2600 AND ALL PUBLIC UTILITY COMPANIES AND OWNERS OF PRIVATE FACILITIES WITHIN THE AREA OF CONSTRUCTION AT LEAST 2 WORKING DAYS IN ADVANCE OF PERFORMING ANY WORK WITHIN SAID AREA.

4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FROM THE CITY BEFORE COMMENCING WORK. THE CONTRACTOR SHALL OBTAIN THE NECESSARY RIGHT-OF-WAY FROM THE CITY THROUGH THE "WATCH MANUAL" AND "CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD CALIFORNIA SUPPLEMENT MANUAL)" LATEST EDITION. THE CONTRACTOR SHALL PROVIDE A 24-HOUR TELEPHONE SERVICE FOR EMERGENCY CALLS TO TRAVELERS AND TRUCKERS.

5. OVERHEAD UTILITY LINE CAUTION: REVIEW APPROVED CONSTRUCTION PLAN. IF CONSTRUCTION REQUIRES WORKERS AND/OR EQUIPMENT TO BE WITHIN 6 FEET OR CRANES OR HOISTING DEVICES TO BE WITHIN 10 FEET OF OVERHEAD ELECTRICITY LINES, CALL SOUTHERN CALIFORNIA Edison CO. AT 310-783-0336.

6. PRIOR TO COMMENCEMENT OF WORK, ALL SURVEY MONUMENTS IN THE PROJECT AREA SHALL BE LOCATED AND RECORDED BY THE GENERAL CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT EITHER BY A LICENSED SURVEYOR OR A CIVIL ENGINEER REGISTERED PRIOR TO JANUARY 1, 1982 AND NEW THE SITES PROVIDED. METHOD OF ESTABLISHMENT SHALL BE STATED ON THE CONSTRUCTION PLAN.

7. GRADE SHEETS PREPARED AND STAMPED BY A LICENSED ENGINEER OR SURVEYOR SHALL BE DELIVERED TO THE INSPECTOR 24 HRS PRIOR TO COMMENCEMENT OF WORK.

8. THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT AT 310-781-6900 PRIOR TO TRIMMING, REMOVING OR RELOCATING ANY EXISTING STREET TREES.


9. UNLESS OTHERWISE SHOWN, ALL TRAFFIC SIGNS SHALL BE RELOCATED OR REMOVED BY THE CONTRACTOR.

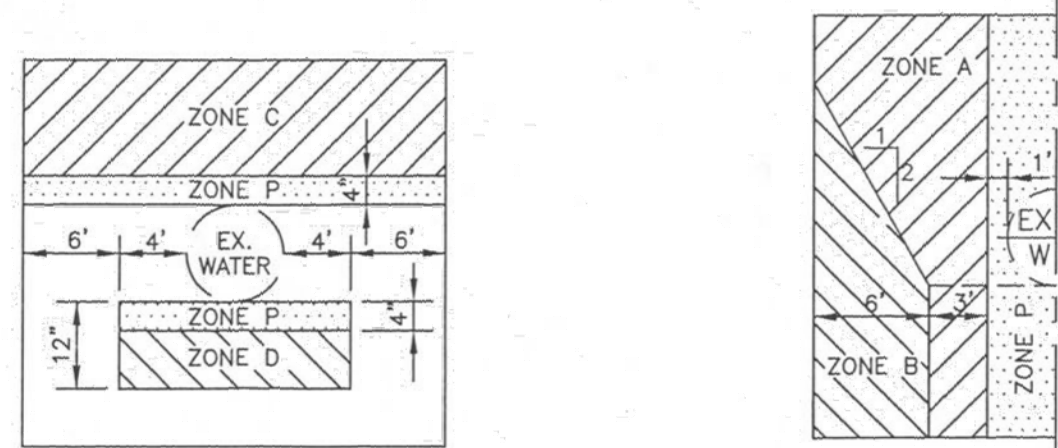
10. BEFORE BREAKING INTO OR CONSTRUCTION ON A COMMUNITY SANITATION DISTRICT SEWER AND PRIOR TO FINAL COMPLIANCE OF THE PROPOSED CONSTRUCTION, THE DISTRICT PROJECT SHALL BE NOTIFIED BY PHONE AT 310-638-1161 IN ORDER THAT REQUIRED INSPECTION MAY BE MADE.

11. EXISTING DOWNGRASSING MANHOLES SHALL BE BULKHEADED WITH BRICK AND MORTAR OR PLUGS APPROVED BY THE INSPECTOR AT NEW INLET DURING CONSTRUCTION OF NEW UPSTREAM LINES. BRICK AND MORTAR OR PLUGS SHALL BE REMOVED IN THE PRESENCE OF THE INSPECTOR'S WORK CLEANING OF THE FIRST UPSTREAM SECTION OF THE NEW SYSTEM.

12. NO CONNECTION FOR THE DISPOSAL OF INDUSTRIAL WASTES SHALL BE MADE TO SEWERS SHOWN ON THESE DRAWINGS UNLESS A PERMIT FOR INDUSTRIAL WASTE DISCHARGE HAS BEEN ISSUED BY THE COMMUNITY SANITATION DISTRICT AND THE SANITATION DISTRICT HAS GIVEN CONSENT.

13. TRENCHES CUT INTO AN EXISTING ROADWAY WITHIN THE PUBLIC RIGHT OF WAY SHALL BE BACKFILLED AND PAVED AS PER TOLERANCE STANDARD 1116.

CITY OF TORRANCE		
DATE ISSUED	SANITARY SEWER GENERAL NOTES	STANDARD NO.
19 FEB 2008		T200
ROBERT J. BESTE PUBLIC WORKS DIRECTOR R.C.E. NO. 50737		 SHEET 1 OF 2




PERPENDICULAR CONSTRUCTION PARALLEL CONSTRUCTION

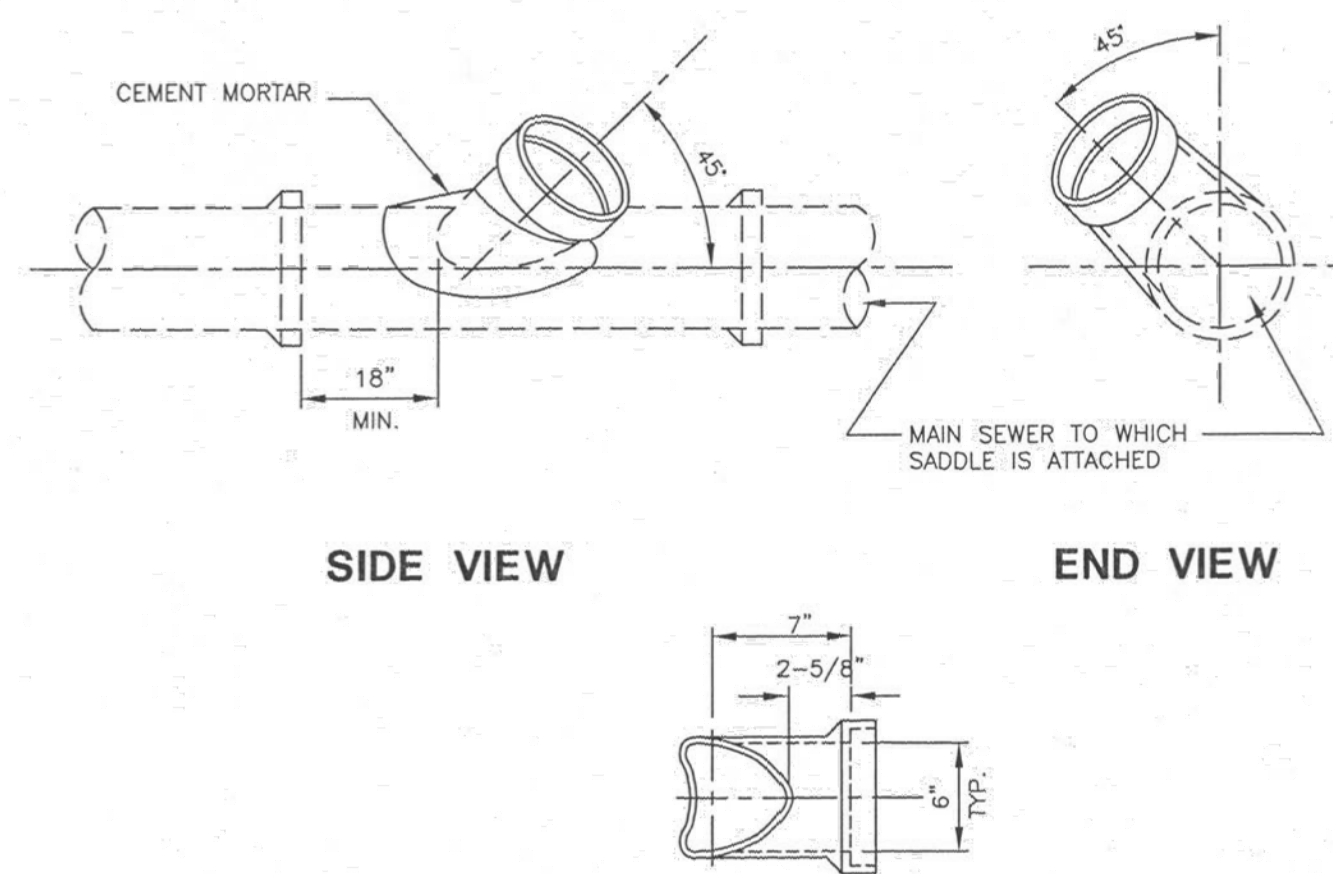
BASIC SEPARATION STANDARDS

1. PARALLEL CONSTRUCTION: THERE SHALL BE AT LEAST 10 FEET HORIZONTAL CLEARANCE BETWEEN PRESSURE DOMESTIC WATER MAINS AND SEWER LINES
2. PERPENDICULAR CONSTRUCTION (CROSSING): PRESSURE WATER MAINS SHALL BE AT LEAST ONE FOOT ABOVE SANITARY SEWER LINES WHERE THESE LINES MUST CROSS.
3. SPECIAL PROVISIONS: ALTERNATE CONSTRUCTION CRITERIA WHERE THE BASIC SEPARATION STANDARDS CANNOT BE ATTAINED ARE SHOWN BELOW:

ZONE	SEWER CONSTRUCTION (EXISTING WATER)
B	1) EXTRA STRENGTH V.C.P. WITH COMPRESSION JOINTS. 2) APPROVED ALTERNATES.
C/D	1) A CONTINUOUS SECTION OF DUCTILE IRON PIPE WITH HOT DIP BITUMINOUS COATING. 2) APPROVED ALTERNATES.
A	NO CONSTRUCTION WITHOUT APPROVAL OF TORRANCE MUNICIPAL WATER DEPARTMENT AND STATE DEPARTMENT OF HEALTH SERVICES.
P	CONSTRUCTION WITHIN THIS AREA PROHIBITED.

CITY OF TORRANCE		STANDARD NO.
DATE ISSUED	SEWER AND WATER SEPARATION REQUIREMENTS	T206
02 JUL 2008		
ROBERT J. BESTE PUBLIC WORKS DIRECTOR R.C.E. NO. 50737 		SHEET 1 OF 1

14. TRENCH RESURFACING SHALL BE OF THE SAME TYPE AS THE EXISTING PAVEMENT, EXCEPT IF EXISTING PAVEMENT IS A.C. OVER P.C.C., RESURFACING MAY BE FULL-DEPTH A.C.
15. MANHOLE COVER SHALL BE CAST WITH THE WORDS "TARRANT SEWER" FOR CITY MAINTAINED LINES AND "PRIVATE SEWER" FOR PRIVATELY MAINTAINED LINES.
16. ALL SEWER LINES CONSTRUCTED TO PUBLIC STANDARDS SHALL BE WITFIED GLAY PIPE (VCP). DURING CONSTRUCTION, ANY USED SUBJECT TO WRITTEN APPROVAL, FROM THE COMMUNITY DEVELOPMENT/PUBLIC WORKS DIRECTOR. ALL HOUSE CONNECTION LATERALS SHALL BE MINIMUM 6 INCH DIA.
17. CONTRACTOR SHALL SET ALL MANHOLE FRAMES AND COVERS TO FINISHED GRADE.
18. CONCRETE ENCASMENT SHALL BE REQUIRED FOR SEWER MAIN LINE AND HOUSE LATERALS WITH LESS THAN 3 FEET OF COVER.
19. THE CONTRACTOR SHALL MAKE AVAILABLE FOR THE INSPECTOR'S REVIEW, ON A DAILY BASIS, AS-BUILT DRAWINGS FOR WORK PERFORMED UP TO AND INCLUDING THE PREVIOUS DAY'S ACTIVITIES. WORK SHALL NOT BE CONSIDERED AS COMPLETE UNTIL AS-BUILT DRAWINGS ARE SUBMITTED TO AND ACCEPTED BY THE TARRANT COMMUNITY DEVELOPMENT/PUBLIC WORKS DISTRICT.



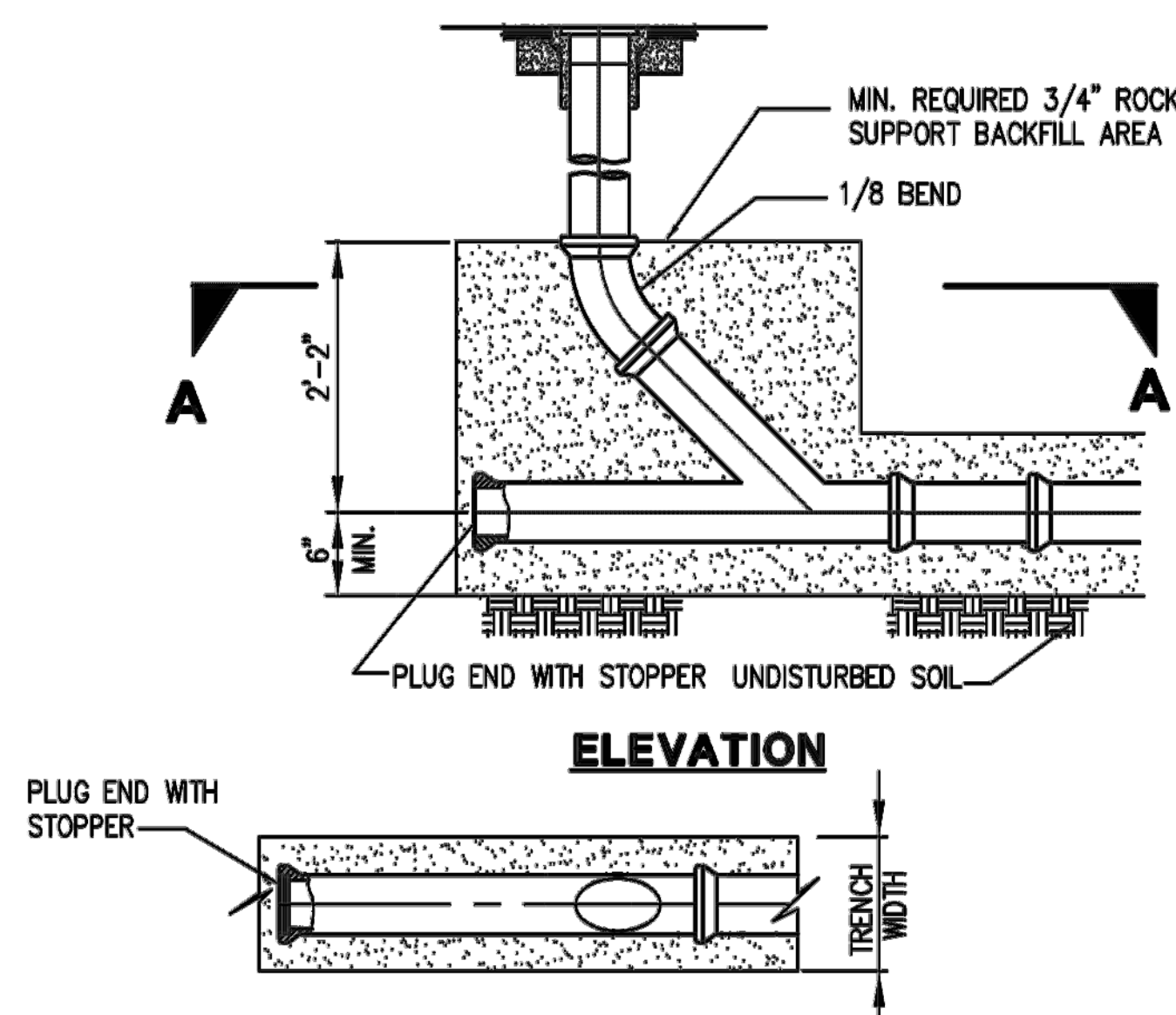
SADDLE PLAN

SHOWING CONTACT OPENING

NOTES:

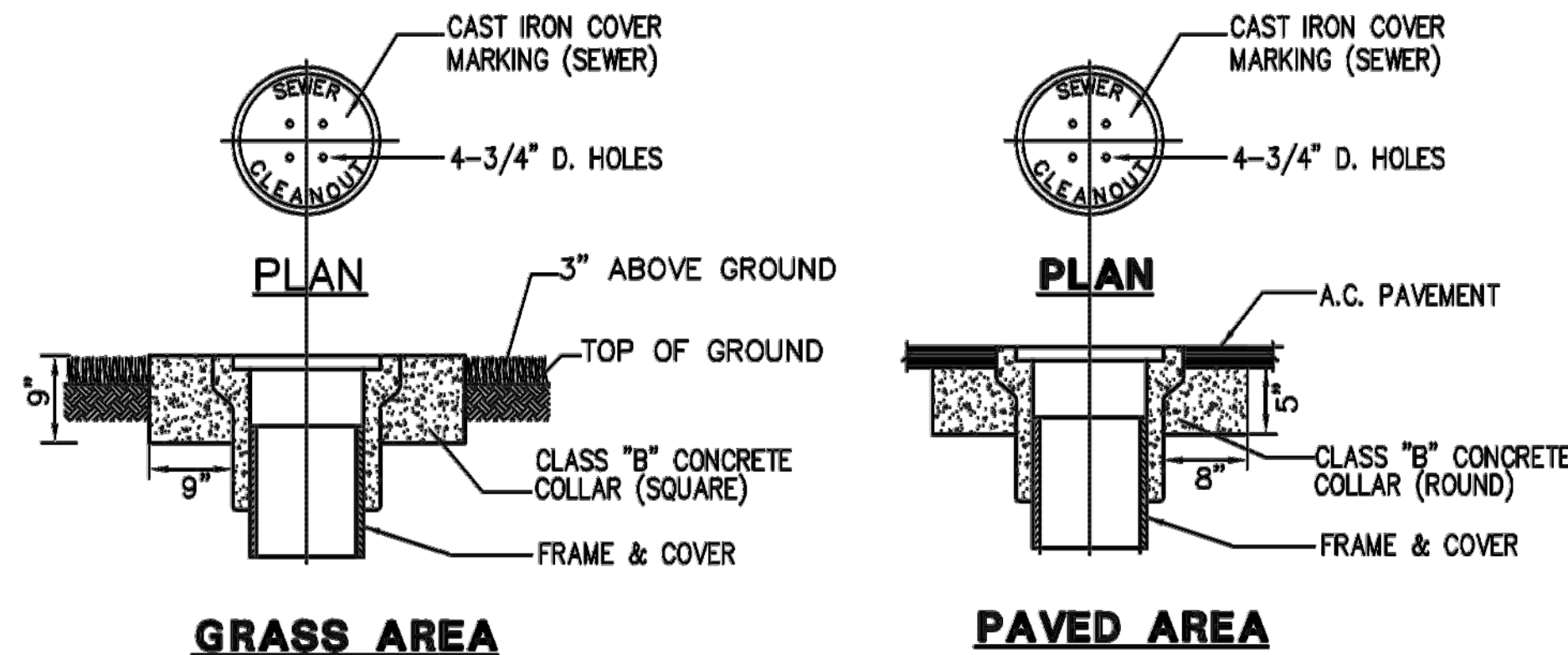
1. OPENING IN MAIN SEWER SHALL BE CUT TO EXACTLY FIT THE SADDLE AND THE SADDLE SHALL BE CAREFULLY ALIGNED, FITTED & ENCASED IN CEMENT MORTAR AS SHOWN.
2. SADDLE INSTALLATION SHALL BE PERFORMED IN THE PRESENCE OF AN INSPECTOR.
3. INSTALLATION SHALL BE CARRIED OUT IN SUCH A MANNER AS TO PREVENT THE INTRODUCTION OF DIRT, BROKEN PIPE, OR OTHER FOREIGN MATTER INTO THE SEWER PIPE.
4. PIPE TO BE SADDLED SHALL BE A MINIMUM OF ONE SIZE LARGER THAN SIZE OF CONNECTING LATERAL BUT IN NO CASE SHALL THE SIZE OF THE CONNECTING LATERAL BE LARGER THAN 8".

CITY OF TORRANCE		STANDARD NO.
SADDLE CONNECTION		T203
DATE ISSUED	ROBERT J. BESTE PUBLIC WORKS DIRECTOR P.C.E. NO. 80737	SHEET 1 OF 1
02 JUL 2008	<i>RB RB</i>	



SEWER CLEANOUT DETAIL

NOT TO SCALE



NOTE:
CLEANOUT PIPE TO BE SAME SIZE AND KIND
OF MATERIAL AS MAIN (4" MIN.)

FIGURE 1. TRENCH WALL

CASE 1: NORMAL TRENCH

CASE 2: WET, SPONGY GROUND, FILLED GROUND (LESS THAN 90% COMPACTION)

CASE 3: BOTTOM TRENCH WIDTH EXCEEDS THE WIDTH SPECIFIED IN STD. SPECIFICATIONS

CONCRETE REINFORCEMENT FOR SEWER PIPE

TABLES BELOW INDICATE DIMENSIONS OF CONCRETE FOR DIFFERENT SIZES OF PIPE

SIZE	W	A	TYPE "X"		CONCRETE PIPE	
			STANDARD STRENGTH	EXTRA STRENGTH	STANDARD STRENGTH	EXTRA STRENGTH
6"	4"	4"	0.051	0.051	0.050	0.050
8"	4"	4"	0.063	0.063	0.063	0.063
10"	4"	4"	0.074	0.074	0.074	0.074
12"	4"	4"	0.086	0.086	0.086	0.091
15"	4"	4"	0.107	0.108	0.107	0.114
18"	5"	5"	0.158	0.166	0.159	0.171

SEE NOTE 2

SIZE	A	TYPE "Z"		CONCRETE PIPE	
		STANDARD STRENGTH	EXTRA STRENGTH	STANDARD STRENGTH	EXTRA STRENGTH
6"	5"	0.017	0.017	0.017	0.017
8"	7"	0.024	0.024	0.024	0.024
10"	9"	0.032	0.032	0.032	0.032
12"	10"	0.037	0.037	0.037	0.037
15"	13"	0.050	0.050	0.050	0.050
18"	15"	0.063	0.064	0.063	0.064

SEE NOTE 2

NOTE 2: COLUMNS INDICATED BY ARROWS IN THE TABLES ABOVE INDICATE SUBC. VARIOUS OF CONCRETE PER LINEAR FT. OF PIPE

[illegible]

" FOR REFERENCE ONLY "

C-3

OF 4 SHEETS

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION AND SUPPLEMENTS THERETO, AS WRITTEN AND PROMULGATED BY PUBLIC WORKS STANDARDS, INC., HEREINAFTER REFERRED TO AS THE STANDARD SPECIFICATIONS, THE TORRANCE STANDARDS, THE AMERICAN WATER WORKS ASSOCIATION STANDARDS LATEST EDITION, AND TO THE SATISFACTION OF THE COMMUNITY DEVELOPMENT OR PUBLIC WORKS DIRECTOR.

2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE, VERIFY DEPTH AND PROTECT ALL STRUCTURES, INCLUDING SUBSTRUCTURES, SHOWN ON THE PLAN. THE CONTRACTOR SHALL BEAR THE ENTIRE COST OF REPAIRING OR REPLACING ANY OF SAID STRUCTURES DAMAGED BY HIM/HER DURING PROSECUTION OF THE WORK. ALL REPAIRS AND REPLACEMENTS SHALL BE DONE IN THE PRESENCE OF THE INSPECTOR. ALL LOCATIONS SHOWN ON THE PLAN FOR UTILITY LINES HAVE BEEN TAKEN FROM AVAILABLE RECORDS AND THEIR COMPLETENESS AND CORRECTNESS ARE IN NO WAY GUARANTEED.

3. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) AT 1-800-227-2600 AND ALL PUBLIC UTILITY COMPANIES AND OWNERS OF PRIVATE FACILITIES WITHIN THE AREA OF CONSTRUCTION AT LEAST 2 WORKING DAYS IN ADVANCE OF PERFORMING ANY WORK WITHIN SAID AREA.

4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FROM THE CITY BEFORE COMMENCING WORK. TRAFFIC CONTROL WITHIN PUBLIC STREET RIGHTS OF WAY SHALL BE IN CONFORMANCE WITH THE CALIFORNIA MUTCD MANUAL OR CITY OF TORRANCE STANDARDS FOR TRAFFIC CONTROL, LATEST EDITION. THE CONTRACTOR SHALL PROVIDE A 24-HOUR TELEPHONE NUMBER FOR EMERGENCY REPAIRS TO TRAFFIC CONTROL AND PAVEMENT MARKINGS.

5. OVERHEAD UTILITY LINES CAUTION: REVIEW APPROVED CONSTRUCTION PLAN. IF CONSTRUCTION REQUIRES WORKERS AND/OR EQUIPMENT TO BE WITHIN 6 FEET OF CRANES OR HOISTING DEVICES TO BE WITHIN 10 FEET OF OVERHEAD ELECTRIC LINES, CALL SOUTHERN CALIFORNIA Edison AT 310-763-9336.

6. PRIOR TO COMMENCEMENT OF WORK, ALL SURVEY MONUMENTS IN THE PROJECT AREA SHALL BE LOCATED AND TIED OUT. ALL CENTERLINE MONUMENTS OR TIES LOST OR DESTROYED BY THIS WORK SHALL BE REPLACED EITHER BY A LICENSED SURVEYOR OR A CIVIL ENGINEER REGISTERED PRIOR TO JANUARY 1, 1982 AND NEW TIE SHEETS PROVIDED. METHOD OF ESTABLISHMENT SHALL BE STATED ON THE TIE SHEET.

7. GRADE SHEETS PREPARED AND STAMPED BY A LICENSED ENGINEER OR SURVEYOR SHALL BE DELIVERED TO THE INSPECTOR 24 HOURS PRIOR TO COMMENCEMENT OF WORK.

8. THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT AT 310-781-6900 PRIOR TO TRIMMING, REMOVING OR RELOCATING ANY EXISTING STREET TREES.

9. UNLESS OTHERWISE SHOWN, ALL TRAFFIC SIGNS SHALL BE RELOCATED OR REMOVED BY THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT AT 310-781-6900 AT LEAST 2 WORKING DAYS IN ADVANCE OF THE WORK.

10. THE CONTRACTOR SHALL DISINFECT WATER LINES UNDER THE DIRECTION OF THE CITY'S WATER QUALITY INSPECTOR. THE TORRANCE MUNICIPAL WATER DEPARTMENT SHALL COLLECT WATER SAMPLES FOR ANALYSIS SUBSEQUENT TO DISINFECTING OF THE PIPELINE BY THE CONTRACTOR.

11. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AT LEAST TWO WORKING DAYS IN ADVANCE OF A PROPOSED WATER MAIN OR EQUIPMENT TO BE SHUT DOWN. THE CONTRACTOR SHALL NOTIFY THE CUSTOMERS EFFECTED BY THE PROPOSED SHUT DOWN AT LEAST 24 HOURS IN ADVANCE. CUSTOMER NOTIFICATION SHALL CONSIST OF A DOOR HANGER SPECIFYING THE DATE(S) AND TIME(S) OF THE PROPOSED SHUT DOWN. NOTICE SHALL CONTAIN THE CONTRACTORS NAME AND TELEPHONE NUMBER. NOTICE SHALL BE APPROVED BY THE INSPECTOR PRIOR TO DISTRIBUTION.

12. OPERATION OF VALVES ON ALL PUBLIC WATER LINES AND THE FIRST NEW VALVE DOWNSTREAM OF A PUBLIC WATER MAIN SHALL BE PERFORMED BY THE TORRANCE MUNICIPAL WATER DEPARTMENT UNLESS OTHERWISE SHOWN.

13. ALL WATER LINES SHALL HAVE 42" COVER FROM PROPOSED FINISHED GRADE UNLESS OTHERWISE SHOWN ON THE PLAN.

CITY OF TORRANCE

DATE ISSUED
12 MAY 2008

STANDARD NO.
T700

ROBERT J. BESTE
PUBLIC WORKS DIRECTOR
R.C.E. NO. 50737

WATER GENERAL NOTES

SHEET 1 OF 2

GENERAL NOTES (CON'T)

14. FOR PARALLEL CONSTRUCTION ALL WATER LINES SHALL BE INSTALLED WITH A TWO FOOT (MIN.) CLEARANCE FROM EXISTING UTILITY LINES (GAS, TELEPHONE, CABLE, POWER...), A MINIMUM OF 12" CLEARANCE SHALL BE PROVIDED WHEN CROSSING UTILITY LINES.

15. NO PVC PIPE SHALL BE INSTALLED UPSTREAM OF THE INLET SIDE OF METERS OR DETECTOR CHECK VALVES.

16. CONTRACTOR SHALL MAKE AVAILABLE FOR THE PUBLIC WORKS INSPECTOR'S REVIEW, ON A DAILY BASIS, AS-BUILT DRAWINGS FOR WORK PERFORMED UP TO AND INCLUDING THE PREVIOUS DAY'S ACTIVITIES. WORK SHALL NOT BE CONSIDERED AS COMPLETE UNTIL AS-BUILTS ARE SUBMITTED TO AND ACCEPTED BY THE COMMUNITY DEVELOPMENT OR PUBLIC WORKS DIRECTOR.

17. TRENCHES CUT INTO AN EXISTING ROADWAY WITHIN THE PUBLIC RIGHTS OF WAY SHALL BE BACKFILLED AND PAVED AS PER CITY OF TORRANCE STANDARD T116.

18. TRENCH RESURFACING SHALL BE OF THE SAME TYPE AS THE EXISTING PAVEMENT, EXCEPT IF EXISTING PAVEMENT IS A.C. OVER P.C.C., RESURFACING MAY BE FULL-DEPTH A.C.

19. PIPE BEDDING SHALL CONFORM TO TORRANCE STANDARD DRAWING T701.

20. ALL FLANGE NUTS, BOLTS AND WASHERS SHALL BE 316 S.S. UNLESS OTHERWISE SHOWN.

21. ALL BURIED PIPE, VALVES, FITTING, ETC. SHALL BE WRAPPED IN 8 MIL POLYETHYLENE.

CITY OF TORRANCE

DATE ISSUED
12 MAY 2008

STANDARD NO.
T700

ROBERT J. BESTE
PUBLIC WORKS DIRECTOR
R.C.E. NO. 50737

WATER GENERAL NOTES

SHEET 2 OF 2

INSTALL BLUE WARNING TAPE
READING "WATER LINE BELOW"
(CENTERED OVER PIPE)

TRENCH WALL

BACKFILL

PIPE ZONE

12"

6"

6"

WATER MAIN

8 MIL POLYETHYLENE WRAP

DENSIFIED SAND BEDDING
(SEE NOTES 1, 2 & 3)

NOTES:

1. SAND BEDDING SHALL CONFORM TO SECTIONS 200-1.5.3 AND 200-1.5.5 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION).

2. DENSIFICATION OF BEDDING SHALL BE ACCOMPLISHED IN CONFORMANCE WITH 306-1.2.1 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION).

3. BEDDING SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY UNDER STRUCTURES AND 90% ELSEWHERE.

ACCOMPANYING STD.'S T700 AND T116

CITY OF TORRANCE

DATE ISSUED
JAN 2011

STANDARD NO.
T 701

ROBERT J. BESTE
PUBLIC WORKS DIRECTOR
R.C.E. NO. 50737

BEDDING FOR WATER PIPE

SHEET 1 OF 1

FOR MULTIPLE TAPS
ALTERNATE AT 45° TO
EACH OTHER

45°

COPPER FLARE NUT
(SEE T703) OR PACK JOINT
(SEE T704)

COPPER SERVICE PIPE

CORPORATION STOP
(BALL TYPE)

BRONZE SERVICE SADDLE

EXISTING MAIN LINE

NOTES:

1. MINIMUM DISTANCE BETWEEN TAPS OR CONNECTIONS SHALL BE 20 INCHES, AND A MINIMUM OF 18 INCHES FROM END OF PIPE.

2. FOR STEEL MAINS DELETE SERVICE SADDLE. A TAP NOZZLE SHALL BE WELDED TO MAIN AND AN INSULATING BUSHING SHALL BE INSTALLED BETWEEN THE TAP NOZZLE AND THE CORPORATION STOP. FOR PIPES WITH WALL THICKNESS THINNER THAN 16 GAUGE A REINFORCEMENT COLLAR PLATE OR FULL WRAP REINFORCEMENT PLATE SHALL BE INSTALLED AS DETERMINED BY THE ENGINEER.

ACCOMPANYING STD.'S T700 AND T703 OR T704.

CITY OF TORRANCE

DATE ISSUED
JAN 2011

STANDARD NO.
T 702

ROBERT J. BESTE
PUBLIC WORKS DIRECTOR
R.C.E. NO. 50737

1" & 2" SERVICE
CONNECTION TO MAIN LINE

SHEET 1 OF 1

EXISTING PIPE

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